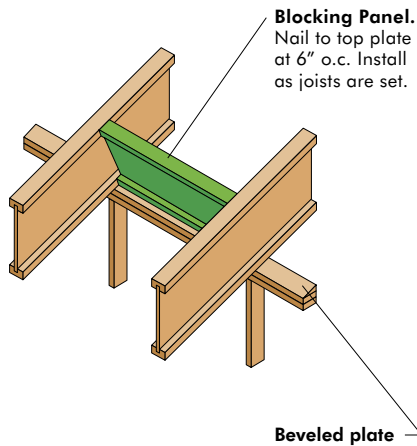


ROOF DETAILS

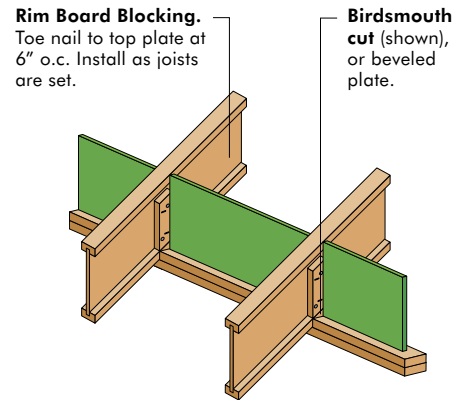
ROOF NOTES:

1. Use minimum 2½" x 0.131" nails unless otherwise noted. Larger diameter nails might split flanges.
2. Fasten joists to top plate with at least two nails. Start nails at least 1½" from end to avoid splitting.
3. Engineered projects might require higher strength connections. Refer to designer's specifications.
4. 1¾" min. bearing at end supports. 3½" at intermediate and cantilever supports.
5. Framing lumber is assumed to be S-P-F unless otherwise noted.
6. See *Web Stiffener Requirements* on page 81.
7. Joists sloped more than ¼ in 12 must be birdsmouth-cut or set on sloped supports (e.g. beveled wall plates, sloped-seat hangers).
8. Birdsmouth cuts are allowed only at low end supports. Do not make birdsmouth cuts at high end supports or at intermediate supports.
9. Details apply to joists sloped up to 12 in 12.
10. Lateral support, to prevent lateral movement and rotation, is required at all supports.
11. Attach straps and hangers according to manufacturer's instructions.

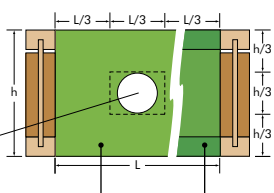
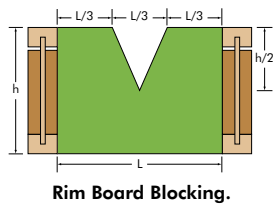
R1 LATERAL SUPPORT



R2 LATERAL SUPPORT

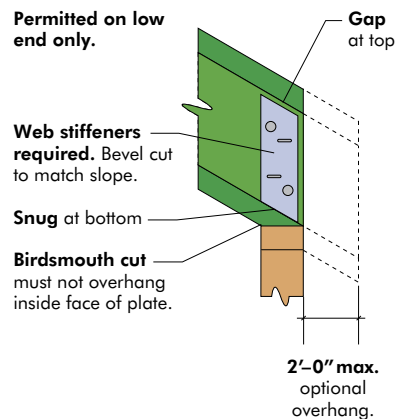


R3 VENTILATION HOLES



Allowable zone for ventilation holes.

R4 BIRDSMOUTH CUT



ROOF DETAILS

R5 OVERHANG

Trim and add blocking as desired for fascia and soffit attachment.

2'-0" max. optional overhang.

Beveled plate (shown) or birdsmouth cut.

R6 OVERHANG

2x filler. Nails at 6" o.c.

2x4 min. beveled bearing block cut to fit snug.

No. 2 S-P-F 2x4 or better. Nails at 8" o.c. 2'-0" max. overhang. 4'-0" min. back span. 24" o.c. max. joist spacing.

Beveled plate (shown) or birdsmouth cut.

R7 OVERHANG

Web stiffeners required at birdsmouth cut. See detail R4.

Birdsmouth cut (shown) or beveled plate.

2x4 min. beveled bearing block cut to fit snug.

No. 2 S-P-F 2x4 or better. 3" x 0.148" nails at 8" o.c. into flange. 2'-0" max. overhang. 4'-0" min. back span. 24" o.c. max. joist spacing.

R8 PEAK

23/32" Sheathing grade panel backer both sides. 18 nails.

Twist strap both sides.

30° max. angle. Beveled plate. Birdsmouth cut not permitted.

R9 PEAK

Strap

Sloped-seat joist hanger.

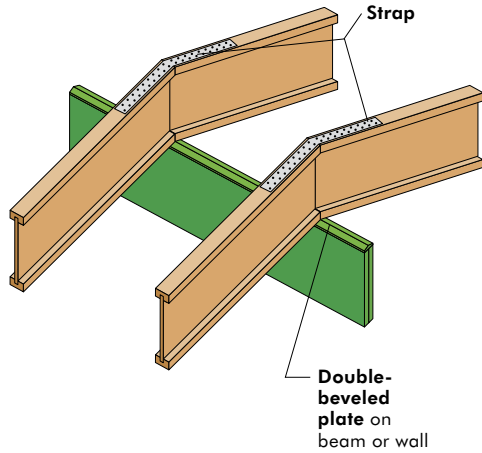
R10 RIDGE

Strap

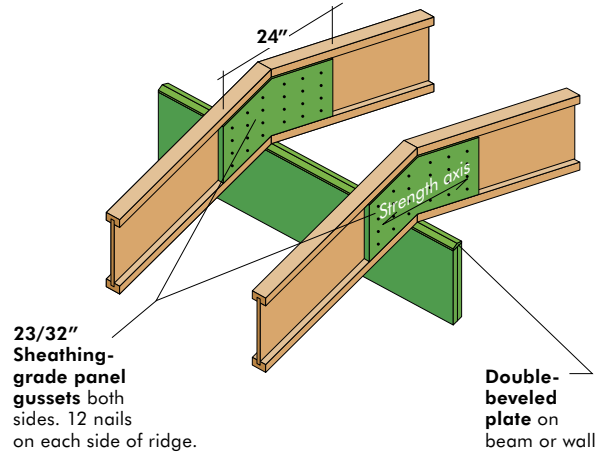
Sloped-seat joist hanger.

ROOF DETAILS

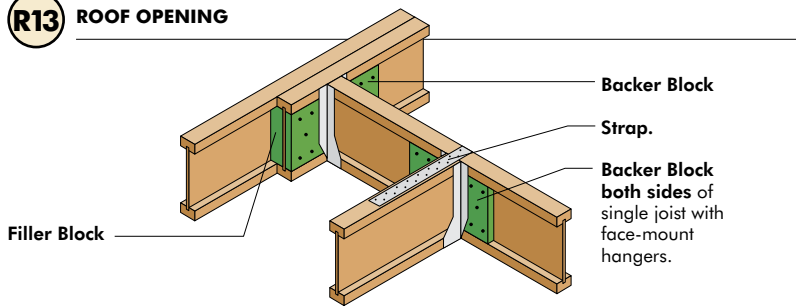
R11 RIDGE



R12 RIDGE



R13 ROOF OPENING



Notes:

1. Side Load is the concentrated load transferred by a joist hanger.
2. Use min. 0.131" diameter nails. For backer blocks, use 2½" nails. For filler blocks, use length shown in table. Note that some joists require filler block nailing from each side.
3. Use Sheathing grade panels, Utility grade S-P-F lumber, or better. Thinner blocks may be combined to achieve specified thicknesses.
4. Size and position blocks to receive all nails, including hanger nails, without splitting.
5. Max. block depth is joist depth minus 3/8" to avoid an interference fit between flanges.
6. For top-mount hangers, install backer blocks snug to top flange.
7. Clinch nails when possible.
8. Attach hangers according to manufacturer's instructions.

Side Load	Backer Nails	Filler Nails
500 lb	8	4
750 lb	12	6
1000 lb	16	8
1250 lb	20	10
1500 lb	24	12
1750 lb	28	14
2000 lb	32	16

Joist Flange Width	Filler Block Nail Length	Filler Thickness	Backer Thickness
1½"	2½" min.	1½" or 1¼"	½" or ⅝"
1¾"	3" min.	1½"	¾"
2⅝"	3¼" min.	2"	1"
2½"	3½" min.	2" or 2¼"	1" or 1⅝"
3½"	3" min, each side	3"	1½"